

65 - INDEPENDENT AGENCIES - REGULATORY

407 - PUBLIC UTILITIES COMMISSION

CHAPTER 32 - ELECTRIC UTILITIES SERVICE STANDARDS

SUMMARY: This Rule establishes service standards for electric utilities.

All electric utilities shall comply with the requirements of the "Rules and Standards of Services for Electrical Companies" Revision No. 3 dated August 1, 1963, except, however, rule 5.01 is rescinded.

I. GENERAL PROVISIONS AND DEFINITIONS

A. 1.01 Authorization of Rules.

1) The Revised Statutes of Maine in Chapter 44, Section 3, provides that the Public Utilities Commission shall be empowered to establish rules and fix standards for electrical service as follows:

"The Commission may make all necessary rules and regulations and may employ such expert, professional or other assistance as is necessary in making investigations or in otherwise carrying out the provisions of this chapter."

2) In accordance with the provisions above, the Public Utilities Commission has adopted the following standards for Electric Service to become effective August 1, 1963. All previous rules or standards conflicting with those contained herein are hereby superseded.

B. 1.02 Power of Amendment.

The adoption of these rules shall in no way preclude the Commission from altering or amending them in whole or in part or from requiring any other or additional service, equipment, facility, or standards, either upon complaint or upon its own motion or upon the application of any utility. These rules in no way relieve any utility from any of its duties under the laws of this State.

C. 1.03 Application of Rules.

The rules shall apply to any person, firm or corporation which is now or may hereafter become engaged as a public utility in the business of furnishing electrical energy for sale within

the State of Maine. No substantial modification of the requirements of these rules shall be made unless authorized in writing by the Commission.

D. 1.04 Definitions.

In the interpretation of these rules, the word

1) "Commission" shall mean the Public Utilities Commission of the State of Maine.

2) "Utility" shall mean any person, firm, private or public corporation, district, municipal, department or any other organization owning, controlling, operating, or managing any electric plant for compensation within this State except where electricity is generated and distributed by the producer through private property solely for his own use or the use of his tenants and not for sale to others, excepting another utility.

3) "Electric Plant" shall mean all real estate, fixtures, equipment and personal property owned, controlled, operated or managed in connection with or to facilitate the production, generation, transmission, delivery or furnishing of electric energy.

4) "Customer" shall mean any person, partnership, firm, company, corporation, municipality, cooperative, organization, governmental agency or similar organization furnished electric service by a utility.

II. CONSTRUCTION, OPERATION AND MAINTENANCE

A. 2.01 Continuity of Service.

1) Every utility shall maintain its entire plant and system in such condition as will enable it to furnish safe, adequate and as far as practicable continuous service.

2) All new construction, reconstruction, maintenance and operation of electric plant shall be in compliance with the most recent revision or revisions of the National Electrical Safety Code, as published by the National Bureau of Standards, United States Department of Commerce.

3) Each utility shall keep a record of all interruptions to service affecting the entire distribution system of any single community, or any significant portion of a community, and shall include in such record the date and time of

interruption, the approximate number of customers affected, the date and time of restoring service, and the cause of each interruption. Such records may be destroyed after two (2) years from the date of such interruption.

4) Each utility shall have such instruments and equipment as will enable them to keep a record of the characteristics of voltage and frequency of the service which they provide. For generating utilities the normal station records are sufficient. Non-generating utilities need not have instruments nor keep records of the frequency characteristics of their service. Service characteristics records may be destroyed after two (2) years.

5) Each utility shall notify the Commission within a reasonable time in writing of interruptions of service to their system as a whole, or any major portion thereof, having a duration of two (2) hours or more. Such notice shall include date, time, duration, and cause of the interruption.

B. 2.02 Frequency.

Alternating current service under normal conditions shall be supplied at 60 cycles per second and under normal conditions shall not have a deviation in excess of two (2) percent.

C. 2.03 Standard Voltage.

Each utility shall adopt a standard nominal voltage, or standard nominal voltages conforming to modern usage, as may be required by the design of its distribution system for its entire service area or for each of the several areas into which its distribution system may be divided. The voltage maintained at the utility's service terminals, as installed for each customer, shall be reasonably constant within the limits set forth in section No. 2.04.

D. 2.04 Voltage Variation.

1) For service rendered principally for residential or commercial purposes the normal voltage variation shall not exceed plus or minus five percent (+ or - 5%) from the standard voltage for any period longer than one (1) minute.

2) For service rendered principally for power purposes the normal voltage variation shall not exceed plus or minus ten percent (+ or - 10%) from the standard voltage for any period longer than one (1) minute.

3) A greater variation of voltage than specified above may be allowed when service is supplied directly from a transmission line, in case of emergency service, or in a limited or extended area where customers are widely scattered and the service supplied does not justify close voltage regulation. In such cases the best practicable voltage regulation shall be provided.

4) Where the utility's distribution facilities are adequate to carry the loads normally imposed, the utility may require that the operating characteristics of utilization equipment shall not cause objectionable voltage fluctuations or other adverse effects.

E. 2.05 Customer Protection.

Each utility shall make every reasonable effort to properly warn and protect its customers, and the public, from harm because of its plant or service.

F. 2.06 Customer Relations.

1) Each utility shall keep on file, in its business offices and open to the public inspection, copies of all rate schedules, rules and regulations, standard contracts or other forms of agreement respecting the relations between the customer and the utility.

2) Each utility, upon request, shall furnish a customer, the schedule of rates applicable to such customer.

3) Each utility shall file with the Commission all special contracts or agreements for billing of electric service to any customer or other utility.

4) Each utility shall, upon request, give its customers such information as is reasonable in order that customers may secure safe, adequate and proper service delivery.

5) Each utility, upon request, shall provide a statement of the past readings of a non-residential customer's meter for any period not in excess of fifteen (15) months. Chapter 81 of the Commission's Rules will govern a utility's responsibility to provide a statement of the past readings of a residential customer's meter.

G. 2.07 Refusal of Service.

1) Repealed.

- 2) A utility may refuse an applicant's request for service if:
 - a) the applicant operates generating equipment and this operation is hazardous or may interfere with the utility's own operation or service to other customers; or
 - b) the applicant's wiring is found not to be in compliance with the National Electrical Code as adopted by the Electrician's Examining Board or with any other lawfully adopted requirement.
- 3) Repealed.

H. 2.08 Adjustment of Bills for Meter Error and Prorated Bills.

1) Whenever the test of a meter reveals its average accuracy to be more than four percent (4%) high, the utility shall refund to the customer such percentage of the total amount of bills covering the consumption indicated by the meter for the previous six (6) months, as the meter was found to be in error at the time of the test, unless it can be shown from the records of either party, that the error has existed for a greater or lessor period, in which case the refund shall cover such actual period.

2) No refund shall be allowed in any case if the seal on the customer's meter is found to be broken, or if there is any other evidence that the meter has been tampered with.

3) In the event of a non-registering meter, customer may be billed on an estimate based on previous usage.

4) In the event un-metered electricity is used without permission, the customer may be billed on an estimate of the energy consumed.

III. METERING

A. 3.01 Measurement.

1) All electrical energy sold by a utility shall be measured by acceptable measuring devices owned and maintained by the utility, except where it is impracticable to do so.

2) Whenever practicable, all electricity sold to one customer on one billing will be measured at one point.

3) Meters operating in conjunction with instrument transformers shall have the multiplier plainly indicated on the meters.

4) The watt-hour constant for the meter itself shall be on all watt-hour meters.

5) All meters in service shall be sealed.

B. 3.02 Accuracy of Watt-hour Meters.

1) No watt-hour meter that has an incorrect register constant, test constant, gear ratio or dial train; or which creeps (one revolution in five minutes or less) shall be placed in service or with the knowledge of the utility, be allowed to remain in service without adjustment and correction.

2) No watt-hour meter that has an error in registration of more than two percent (2%) at either light or heavy load, shall be placed in service or with the knowledge of the utility, be allowed to remain in service without adjustment and correction.

3) Watt-hour meters shall be tested and adjusted for both light loads (5 to 10% of rated load) and heavy loads, (60 to 100% of rated load).

4) Meters shall be adjusted as closely as practicable to the condition of zero error. The tolerances are specified to allow for necessary variations, and meters must not be adjusted to the tolerances allowed.

5) The average accuracy of a watt-hour meter shall be defined as one-fifth of the algebraic sum of 1) four times the error at heavy load, and 2) the error at light load.

C. 3.03 Accuracy of Demand Meters.

All demand meters must be accurate to within two percent (2%) of full scale. The timing element shall be accurate within two percent (2%).

D. 3.04 Meter Testing Facilities and Equipment.

Each utility shall, unless specifically excused by the Commission, provide for and have available such meter laboratory, standard meters, instruments, and other equipment and facilities as may be necessary to make the tests required by these rules. Such equipment shall be acceptable to the Commission and shall be available at all reasonable times for the inspection of any

authorized representative of the Commission.

E. 3.05 Pre-installation Meter Tests.

1) Service watt-hour meters and demand meters may be tested in place with approved testing apparatus and under local conditions of operation. However, it is preferred that all meter testing be done in the utility's meter laboratory under better controlled conditions.

2) All new watt-hour meters and demand meters shall be tested, calibrated and certified as to accuracy by the manufacturer or tested and calibrated by the utility in its own meter laboratory before being installed.

3) Instrument transformers installed with meters shall be certified as to accuracy by the manufacturer or shall be tested for ratio and phase angle in the meter laboratory of the utility, or in another laboratory or recognized standing, before being installed.

F. 3.06 Periodic Meter Tests.

Each utility shall make periodic tests of all watt-hour and demand meters which are in service on customer's premises.

1) All watt-hour and demand meters manufactured prior to January 1, 1941, shall be tested according to the following schedule:

(a) Watt-hour meters not exceeding 750 volts:

<u>Category</u>	<u>Test Interval</u>
Alternating current-single phase	
Exceeding 25 amperes.....	24 months
25 amperes and less.....	60 "
Alternating current-polyphase	
Exceeding 150 amperes.....	12 "
150 amperes and less.....	24 "
Meters on circuits exceeding 600 volts....	6 "

(b) Meters on circuits exceeding 750 volts shall be tested every six months.

(c) Demand Meters:

<u>Category</u>	<u>Test Interval</u>
Class I Curve Drawing Instruments.....	12 months
Class II Integrated Demand.....	Same as Watt-hour Meter
Class III A Lagged Demand, proportional timing.....	48 months
Class III B Lagged Demand, exponential timing.....	60 months

2) All watt-hour and demand meters manufactured since January 1, 1941, shall be subject to the following extended periodic test intervals:

- (a) Self contained AC meters together with associated equipment, such as demand devices, phase shifting transformers, and control devices shall be tested within a period of six months before to six months after ten years of service.
- (b) Meters on installations where current and potential transformers are installed, and where the voltage at the metering point is not greater than 750 volts, shall be tested at last each 24 months.
- (c) Meters on installations where current and potential transformers are installed, and where the voltage at the metering point is greater than 750 volts, shall be tested at least once each 12 months.

3) Upon request, and upon satisfactory evidence that a utility maintains and uses an adequate, modern testing facility and keeps a proper record of its testing program, the Commission will waive paragraph 3.06 b above, and permit such utility to either extend the period between test or to adopt a practice of testing a statically adequate sample for all of its service watt-hour meters manufactured since January 1, 1941.

4) Periodic meter test data shall be summarized and furnished to the Commission on request.

G. 3.07 Requested Meter Tests.

1) Each utility shall, without charge, make a test of the accuracy of registration of a meter upon request of a customer, provided that the customer does not request such test more frequently than once in 12 months.

2) When a customer requests a meter test within 12 months after the date of installation or of the last previous test of his meter, he may be required by the utility to make a deposit which will cover the reasonable cost of such test. The amount so deposited shall be refunded or credited to the customer as a part of the settlement of the disputed account if the meter is found by said test to have an error in excess of plus or minus 4 percent; otherwise the reasonable cost of the test may be retained by the utility.

3) A customer may be present when the utility conducts the requested test on his meter or, if he desires, may send another person to represent him. A written report, giving the results of such test shall be made to the customer and a copy of this report and other data pertinent to the test kept in the utility's records for a period of at least two years.

H. 3.08 Meter Records.

1) Each utility shall keep a record of (1) the names and addresses of all its customers with an identifying number of the meter or meters used by each of them and (2) all its meters, showing dates of installation and removal.

2) A complete record shall be kept by each utility of all test of meters installed on customer's premises. Such record shall include: an identifying number of the meter; type and capacity; meter constants; date and kind of test made; the reading of meter before and after test is made; the error (or percent accuracy) at heavy and at light load, as found and as left after adjustment at each test. These records shall be continuous for at least two periodic tests and in no case for less than three years. Each utility shall file with the Commission such reports of meter tests as the Commission may request.

IV. RECORDS AND REPORTS

A. 4.01 Availability.

All records required by these rules shall be kept within the state at the office or offices of the utility and shall be open for examination by the Commission or its representatives at all reasonable hours. All such records shall be carefully preserved for a least two years unless in a particular rule a

different period is specified.

B. 4.02 Station Records.

Each utility shall install such instruments of meters as may be necessary to obtain a daily record of the load and a monthly record of the output of its generating stations. Each utility purchasing electrical energy shall install such instruments or meters as may be necessary to furnish full information as to the monthly purchases, unless the wholesaler has such instruments installed and supplies that utility with a copy of the pertinent data. Each utility shall keep a record of:

1) The time of putting in and taking out of service the generating units and feeders.

2) All tests and special reports as the Commission may request from time to time.

C. 5.02 Billing.

1) Bills shall be rendered periodically and in compliance with the utility's general rules and regulations. These bills shall inform the customer as to the date and reading of the meter, the quantity of energy consumed, the demand charge if appropriate, and the amount due.

2) If the computation of the bill is based on factors other than a definite charge per unit such factors as will allow a ready re-computation shall appear on the bill. This should include, but not be limited to, sales tax and fuel adjustments.

3) Chapter 81 of the Commission's Rules governs the billing requirements for residential customers.

D. 5.03 Rate Schedules, Rules and Regulations.

1) Each utility shall file with the Commission all schedules of rates, tolls, charges, and Rules and Regulations. These shall conform with but not be limited to the provisions herein contained.

2) Each utility shall adopt a comprehensive safety manual for the safety of its employees and supply a copy to the Commission and each of its employees assigned to electrical work. Before assigning any employees to electrical work, the utility shall be satisfied that he has been properly informed of safe practices and is cognizant of the hazards involved in the work to be performed.

BASIS STATEMENT: The factual and policy basis for this rule is set forth in the Commission's Order Adopting Rule and Statement of Factual and policy Basis, Docket No. 88-51, issued July 29, 1988. Copies of this Order and Statement have been filed with this rule at the Office of the Secretary of State. Copies may also be obtained from the Administrative Director of the Public Utilities Commission, 242 State Street, Augusta, Maine 04333-0018.

AUTHORITY: 35 M.R.S.A. §§104, 111, 704 and 1308

This Rule was approved by the Secretary of State August 1, 1988 and will be effective August 6, 1988.